

U.S. Department of Transportation

Research and Special Programs Administration

DEC 19 2003

Mr. Philip Abraham Huntsman Corporation 3040 Post Oak Boulevard Houston, Texas 77056

Ref. No. 03-0288

400 Seventh St., S.W.

Washington, D.C. 20590

Dear Mr. Abraham:

This responds to your November 6, 2003, letter requesting clarification on the hazard class of your product under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Specifically, you request verification that the hazard class assigned to your product "Jeffamine D-2000, polyoxypropylenediamine" is correct.

According to your letter and enclosed test data, your product is currently described as "Corrosive liquids, toxic, n.o.s. (polyoxypropylenediamine), 8, UN 2922, PG II" with a subsidiary Division 6.1 toxic hazard for oral toxicity. You state that based on two separate tests, your product meets the defining criteria in the HMR for Class 8 corrosive liquid as the primary hazard class with a subsidiary Division 6.1 toxic hazard for oral toxicity. However, using your Huntsman test data, your competitor has classed the same product as a Class 8 corrosive liquid with no subsidiary Division 6.1 toxic hazard for oral toxicity. You request verification on the correct hazard class.

Under § 173.22, it is the shipper's responsibility to properly class and describe a hazardous material for shipment. This Office does not ordinarily perform that function. However, based on the information and test data provided in your letter, it is the opinion of this Office that your product is properly classed as a Class 8 corrosive liquid at the packing group II level with a subsidiary Division 6.1 toxic hazard for oral toxicity.

I hope this answers your inquiry.

Sincerely,

Susan Gorsky

Jasa Drof

Senior Transportation Regulations Specialist

Office of Hazardous Materials Standards



030288

173.132

HUNTSMAN

Page 1 of 2

Boothe \$173.132 Definition 03-0288

November 6, 2003

Mr. Edward Mazzullo, Director
Office of Hazardous Materials Standards (DHM-10)
Research and Special Programs Administration
U.S. Department of Transportation
400 Seventh St., SW
Washington, DC 20590-0001

Re: Petition for a ruling to provide an appropriate transport classification for product JEFFAMINE® D-2000

Dear Mr. Mazzullo,

The combined Huntsman companies constitute the world's largest privately held chemical company. The operating companies manufacture basic products for a variety of global industries including chemicals, plastics, automotive, aviation, footwear, paints and coatings, construction, technology, agriculture, health care, textiles, detergent, personal care, furniture, appliances and packaging.

JEFFAMINE ® D-2000 polyoxypropylenediamine is a member of a family of polyamines, manufactured by Huntsman, having repeated oxypropylene units in the backbone. This product is a difunctional primary amine with an average molecular weight of approximately 2000. Its amine groups are located on secondary carbon atoms at the ends of an aliphatic polyether chain.

There were two separate Acute Exposures Oral Toxicity studies done in 1991 and 1993 on this material by an independent testing facility. These tests determined that JEFFAMINE ® D-2000 polyoxypropylenediamine is considered toxic if swallowed. Both tests consistently resulted in single oral dose LD $_{50}$ values in rats to be less than 0.5 g/kg. The Draize score for skin irritation in rabbits is 8.0/8.0 and the product has been determined to be corrosive to the skin by the DOT 4-hour test.

Based on the test data, Huntsman currently classifies JEFFAMINE® D-2000 for shipping as a "Corrosive Liquids, Toxic, N.O.S.", and a Technical Name given as polyoxypropylenediamine. The Primary Hazard is Class 8 and a Subsidiary Hazard Class 6.1, with UN 2922, and a Packing Group III designation for packaging.

A Huntsman's competitor also sells this polyoxypropylenediamine brand. They have concluded from the same Huntsman test data, that the oral toxicity value is obtained primarily due to the effects of corrosion on the internal organ tissues of the animals rather than a secondary oral toxicity hazard of the material. Therefore, they have been marketing and shipping this material with only a Corrosive hazard designation. However, Huntsman asserts that the tests indicate the corrosive agents in this product do not influence its oral toxicity hazard.

Based on Huntsman developed information, which is publicly available, Huntsman believes that the omission of Toxic hazard from the competitors shipping classification for this material may result in an increased risk of adverse health effects from accidental exposures to this product.

Huntsman petitions your office to review the enclosed test data and MSDS for JEFFAMINE® D-2000 and provide a ruling on the appropriate transport hazard classification for this product. Huntsman believes that the enclosed test data will corroborate Huntsman's assertion that the corrosivity of this material has minimal impact on the oral toxicity of the product.

If you need further clarification on the data provided, then please don't hesitate to contact me.

Sincerely,

Philip Abraham

Huntsman LLC Hazardous Materials Specialist 3040 Post Oak Boulevard Houston, Texas, 77056

Telephone: 713-235-6025

Enclosures:

- 1). Test Summary
- 2). Test data -1991
- 3). Test data 1993
- 4). MSDS